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I.

REMARKS ON VACCINATION.

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HAVING been employed during the greater part of my professional life in the performance of vaccination, and having paid particular attention to the various circumstances affecting the cowpox vesicle during its progress, and its efficacy as a security against smallpox, I consider myself entitled to make the following observations and remarks upon the subject.

1. The period of life most suitable for vaccination appears to me to be from one month after birth to one year old. When performed during that period, the vesicle goes through its progress in a more complete and perfect manner, and contains within its cellular structure a greater quantity of virus, of the purest and most efficient quality, than it does when performed at any other period of life.

From my experience, I lay it down as an axiom, that the earlier in life vaccination is performed, the more complete, efficient, and beautiful (if an enthusiast be allowed the expression) in its appearance, will be the future vesicle throughout its various stages; and that the later in life, the reverse of the position holds good. Indeed I always feel

uncomfortable in vaccinating individuals (such as recruits who are sent to the Royal Dispensary, and others) at an advanced age. The vesicle seldom gives satisfaction, and its security at an after period, as a preventive against smallpox, is at the best doubtful.

2. A healthy infant, plump, and well filled up in flesh—one brought up in pure air, cleanly, and of healthy parents—invariably produces a more beautiful and effective vesicle in all its stages, than the emaciated, puny infant of large cities; and in circumstances the reverse of those above mentioned.

3. In introducing the vaccine virus into the arm of the infant, I invariably make use of the round-pointed vaccination lancet contained in the cases of inoculating instruments sold in the cutlers' shops, and never use the common bleeding lancet. The former scratches the cutis very gently, steadily, and to a considerable extent, introducing a large quantity of virus into the wound, which makes the future vesicle of a long shape and well filled with lymph—a circumstance of considerable importance, when many infants are afterwards to be vaccinated from it. It also makes a practitioner careful and interested in the future success of his operation. The common sharp-pointed bleeding lancet, on the contrary, with the utmost care, and in the

most experienced hands, gives unnecessary pain, pricks deeply, inserts only a small quantity of virus, produces effusion of blood, washing out the lymph, rendering the formation of the future vesicle doubtful—producing one small, of a round form, and containing too small a quantity of the vaccine fluid for future vaccination.

4. Vaccination which is performed by introducing the vaccine virus in its most recent state, flowing from the vesicle of an infant, at once into the arm of another, is always preferable to the inoculation performed from glass, or from virus preserved in any other way, by crust, &c.; and I feel convinced that *the perfection and security of the future vesicle will be in proportion to the freshness of the vaccine virus*. I would recommend the practitioner, in all cases, when it can be done, to send the infant to be vaccinated to the infant from whose arm the virus is to be taken, and to attend and perform the operation himself. Besides, there is a satisfaction to all concerned in seeing the infant, and in being assured of the certainty of the vaccination.

5. Vaccination ought, in every case, to be performed in two places, and at the same time, in every infant. Some practitioners prefer to insert the virus into one place, in each arm; others to insert it into two places in the same arm. When the latter method is followed, the inoculations ought to be so far from each other that the inflamed areola, at an after period, surrounding each vesicle, may not run together. *If vaccination be performed in one place only in an infant, no virus ought at any after period to be taken from the vesicle, otherwise too little will remain to be ab-*

sorbed into the constitution; and its future efficacy, as a preventive of smallpox, may be uncertain. Besides, were it punctured, its future progress might be interrupted, or totally destroyed.

6. From long experience I am inclined to think that *temperature, or weather, affects, to a considerable extent, the perfection of the vaccine vesicle*. I have always observed that the vesicle is more complete, and more certain of going through its various stages, during the summer months, and particularly during warm seasons, when it is turgid with pellucid virus, than during the winter, when the weather is cold and tempestuous; at which period the vesicle is small, imperfect, and flaccid.

7. It is unnecessary, generally speaking, in almost any instance, to administer purgatives, or any other medicines, to the infant during the progress or after-treatment of vaccination. In the Royal Dispensary, some time ago, it used to be an invariable rule to administer a powder of rhubarb and magnesia to every infant after vaccination. For many years past this has been entirely omitted.

8. *The proper period for inoculation from the vaccine vesicle, when it has pursued its regular course, is undoubtedly the eighth day*. At that time its cells are fully distended with transparent virus, and it is in its greatest state of perfection. If vaccination is performed from the vesicle upon the seventh day, it will be small in size, contain a minute quantity of virus, and its future progress will be retarded or totally destroyed. If the vesicle is allowed to advance in its progress until the ninth day, its virus will then be found to be opaque, the watery part being absorbed, and

vaccination performed from it will probably fail.

9. A larger number than five children ought never to be vaccinated from the same vesicle, however large it may be, or however much virus may be contained in its cells. As the vaccination in those last operated on will undoubtedly fail, perhaps from the virus becoming weaker in its nature, I am of opinion that, in such a case, the vesicles of the child first inoculated will be more perfect in every respect than those of the second; and so on until the vaccination fails entirely.

10. *In taking virus from the infant, for carrying on future vaccination, one only of the two vesicles should be punctured or emptied of its contents:* the other ought, in every case, to be allowed to remain uninjured, that its virus may be absorbed into the constitution, rendering the little patient for life afterwards proof against smallpox infection. If the virus be completely withdrawn from both vesicles, and its consequent absorption into the animal economy be prevented, I feel doubtful whether or not, at an after period, it will afford sufficient protection against smallpox contagion: at least, when the entire virus of one vesicle is allowed to pass into the constitution, as now recommended, the result must be far more satisfactory.

11. When virus is taken from the vesicle, and preserved upon squares of glass for future vaccination, it ought always to be deposited in a mass upon the centre of one of the squares, and allowed to stand exposed to the air until it become viscid, or almost dry, previous to covering it with the other plate. If the two plates be brought together when the virus is still fluid,

it will be dispersed across the surface of both plates, forced over their edges, and rendered unfit for future vaccination. *The best and most convenient method of preserving vaccine virus for future inoculation, with which the medical world is as yet acquainted, is undoubtedly the stoppered phial, with its stopper possessing a considerable surface, ground opaque, and slightly concave; and of one such every practitioner should be possessed.*

12. If we take into consideration how often virus is made use of for vaccination, which was not that of cowpox, in its proper condition; or, never taken from the vaccine vesicle at all—how often such individuals are passed off as vaccinated—we are not to be surprised at the numerous cases brought forward of smallpox occurring after vaccination.

During the months of November, December, and January, of the past winter, whilst the vaccination carried on at the Royal Dispensary was entirely performed by me, I have observed, that the vesicles upon the arms of the children inoculated, with very few exceptions, have not gone through the same regular and complete course, which they were accustomed to do, during the summer months; and which I have always formerly seen them do. They have been small in size, flaccid, their cellular structure imperfectly filled with virus, and in many instances (I may say always, if punctured upon the seventh day, when virus was unusually difficult to be procured) they have died away without giving satisfaction, or they have never come forward at all. Vaccination, also, performed from these vesicles, has either proved unsuccessful, or, as might naturally have been expected, has only pro-

duced pocks, more imperfect and unsatisfactory than themselves. During the months above mentioned, I have been frequently obliged to borrow vaccine virus from other sources, to keep up the inoculation at the establishment; in place of having a superabundant and profuse supply at all times, to give to others, as was formerly the case. And, from the numerous applications made to me for a supply of virus, during the above mentioned interval, by private individuals and by public institutions, both in town and country, I am entitled to conclude, that they must have been in a similar situation themselves.

It is but candid, however, to state, that during the tempestuous weather, which prevails during the winter months, mothers will not bring out their children to a public institution for vaccination, particularly as inoculation is then performed only on two days out of the seven (*viz.* Wednesdays and Saturdays at the Royal Dispensary), and as the virus is only in activity during the eighth day, the supply of fresh virus runs out upon such occasions. This seldom or never happens at any other period of the year; and forms one of the causes injurious to vaccination, during the winter season.

In consequence of what I have now brought forward, in the preceding pages, the following important questions force themselves upon my mind. What has been the cause, or causes, of the falling off in the progress of the cowpox vesicle, or of vaccination, during the winter months? Has it been owing to the tempestuous weather and diminished temperature, which prevail during the winter season; and particularly this last year? Has it been owing to the prevalence and

severity of the smallpox, at that period uncommonly fatal—and raging round the institution, mitigating or destroying the energy of the cowpox virus? Has it been owing to the degenerating of the vaccine virus at present in our hands, owing to its long confinement to the human subject; and must we again have recourse to the original supply—the udder of the cow?

Is there any other cause which can be assigned for it, of which I am ignorant, or have omitted to mention? or have these various circumstances, acting together, so far destroyed or diminished its energy? Will vaccination, carried on and passed through in an imperfect and unsatisfactory manner, secure the infant, at all future periods, against the contagion of smallpox? Has this been the principal or only cause (taking into consideration the many uneducated individuals—nurses, blacksmiths, &c. who perform vaccination, and the inefficient and uncertain state of the virus introduced into the human constitution, under the name of vaccine fluid, by such individuals) of the comparative disrepute into which vaccination has fallen at the present day?

I may be blamed, and perhaps justly so, for making these remarks at the present moment—for throwing out any ideas that may have the slightest tendency to lessen the public opinion of the benefits arising from vaccination. The remarks, however, are intended to be confined to the medical profession. My intention is to strengthen the benefits arising from vaccination—to do away any circumstance that may prove prejudicial to its efficacy, and I hope that my intentions will not be misapprehended. My ideas are, 1st, That it is proper again to have

recourse to the original source—the udder of the cow. 2d, That vaccination, conducted under proper management, confined to well educated medical individuals, and to such only, and carried on at favorable seasons of the year, will flourish and prosper. And, 3dly, That it is, and always has been, under such circumstances, a security against smallpox, and a modifier, when not had recourse to too late, of its virulent action.

I perform the vaccination duty every three months at the Royal Public Dispensary, alternately with my colleague, Dr. Warden; and the observations above made apply to the vaccine vesicle as it presented itself during the months of November, December, and January, the intensity of winter, and at a period when much tempestuous rainy weather prevailed. I have now resumed the same duty, during the month of May, the first month of summer, during which the weather, although chilly, in consequence of the prevalence of north, easterly, and north-easterly winds, has been clear and dry, and as the temperature increases, I feel happy to say that vaccine vesicles have gradually regained their plump appearance, and now give me perfect satisfaction; the virus contained in their cells being abundant, transparent, and fulfilling every purpose required of it. Am I not, therefore, entitled to conclude, that diminished temperature and tempestuous weather diminish the appearances and properties of the vaccine vesicle? and that increased temperature and dry weather again restore it to its perfect state? In other words, that vaccination succeeds much better, and is more effectual as a preventive against smallpox, when

performed during summer than during the winter months. I must also state that, within these few weeks, smallpox has almost ceased to exist in the neighborhood of our dispensary, and consequently cannot exert its effects in diminishing the efficacy of the vaccine virus. During the month of April, it may be also proper to mention, Dr. Warden received a large supply of vaccine lymph from the London National Vaccine Establishment, and made use of it. Therefore, the vaccination at present going on may be said to have been propagated from a different source from what was in existence during the months of November, December, and January, to which my remarks apply.

II.

CASE OF IDIOPATHIC PHLEBITIS.

By PAUL S. KNIGHT, M.D.

THE following case is related in the second number of the North of England Medical and Surgical Journal, by Dr. Knight, of Glossop.

Joseph Harrop, aged 48, is a strong muscular man, but considerably the worse from wear and tear. He served in the Peninsular wars in the Horse Artillery, and was there wounded by musket shot, once on the lower part of the right tibia, and another time the ball penetrated through the inner part of the thigh, passing pretty near the trochanter minor, also on the right side; he also suffered much from exposure at nights, and excessive fatigue, and he supposes that, in consequence, the veins of both legs have become varicose. In November last he was employed as a watchman, and during one very cold night, he suffered much, and

shortly after pain and erysipelatous inflammation made its appearance on the inner side of the left leg up the course of the absorbents; and for which he took medical purgatives, and the carbon. sodæ, and applied to the part leeches and a sedative lotion. On the 2nd December, about a fortnight after the first application for relief, the man complained of headach, with a pulse about ninety and sharp, and a countenance expressive of great anxiety; I found the vena saphena inflamed, and to the touch it conveyed the sensation of a cord under the integuments, extending from a little above the inner condyle of the knee, up to the abdominal ring; the integuments of the knee immediately above the vena saphena in a state of very active inflammation, and the vein itself at that part, perceptible to the eye, bulging and large, and somewhat elastic on pressure. As this tumor produced extreme pain, and as it was quite clear that all circulating communication was cut off, I resolved to open it freely. A large clot of coagulated blood instantly plugged up the orifice, but was gradually protruded out, and clot after clot succeeded, great ease being the speedy result. Below this spot I was subsequently obliged to open two abscesses that had formed in the vein, and from which healthy pus mixed with coagulated venous blood was discharged; these abscesses healed readily, but repeated local and general bleeding, the latter performed in the erect posture, and continued till fainting was produced, was necessary to subdue the soreness of the part. This had scarcely been accomplished on the 19th Dec. 1829, when the poor fellow directed my attention to the vena saphena of the right thigh; it was inflamed from

below the knee up to the abdominal ring, that is, it felt extremely sore, and produced to the touch the same impression that a cord would; a slight blush was visible immediately over the vein—thirty-six ounces of blood were taken from the arm, and two dozen leeches applied along the course of the inflamed vein.—*R. Pil. Hydrarg. ʒi. in bol. ii. divide capiat i. nocte maneque.*

20th Dec.—Much pain on pressure—pulse hard and full, countenance very anxious, complains of headach, bowels open.

V. S. ad lb. ii. and apply twenty-four more leeches.—R. Subm. Hydrarg. ʒi. Opii. purif. gr. iv. Cons. Ros. q. s. ut. ft. massa in pilulas xxiv. dividend. quarum capiat unam quarta quaque hora.

21st.—Blood taken yesterday much cupped and buff colored. Pulse eighty and sharp—continue the pills. Pulse softer.

22nd.—Mouth affected, pulse soft and free; a hard tumor in the groin, as felt yesterday, is separated into detached and small hard masses; the ptyalism was continued about a fortnight, when all inflammatory action had subsided.

Medico-Chirurgical Review.

III.

CASE OF POISONING BY ARSENIC AND LAUDANUM COMBINED, IN WHICH THE SYMPTOMS USUALLY PRODUCED BY ARSENIC WERE ABSENT.

ON the 7th August, about 12 o'clock, Marianne Warwick swallowed three ounces of laudanum, and about two drachms of arsenic, and was seen by Mr. Jennings, who reports the case, soon after four. She had no pain in the stomach, bowels, or head; complained of no burning in the throat, or uneasiness in the

abdomen when pressed upon ; and she was perfectly collected. She complained, however, of being tired and sleepy, which she ascribed to the effects of an emetic which she had taken two hours before, which had operated violently. Her eyes were blood-shot and heavy, and the pupils contracted. Pulse about 100. The stomach was freely evacuated, the contents being preserved for analysis. The usual medicines to counteract the effects of the laudanum, together with bleeding from the jugular vein, leeches, blisters, and cold affusion, were employed.* The patient was kept constantly walking about ; she gradually became more drowsy ; at eight o'clock she sunk into a state of coma, and died before nine.

Examination of the body sixteen hours after death.—On removing the dura mater, the parts presented a very turgid appearance, and the large veins which wind between the convolutions of the brain, instead of presenting their ordinary blue tint, were of a dirty treacle color. The pia mater was more than usually loaded with blood.

On opening the cavity of the abdomen, the stomach appeared large, and a few small vessels were evident in one or two places on its surface—but nothing that was calculated to attract attention presented itself. The stomach contained about half a pint of fluid ; its mucous coat was generally rather pale, but at the great arch, near the pylorus, there were two patches that presented a red appearance—the one the size of a half-crown, the other about as large as a shilling. There was no ulceration. The mucous membrane of the duodenum

presented, throughout, a general light pink appearance. In the jejunum it was highly injected, and presented numerous patches of an intensely red color. The appearances of inflammation were less marked in the ilium, though several patches, acutely inflamed, were observed in it. No ulceration of the small intestines could be detected.

On analysis, the contents of the stomach exhibited a slight trace of arsenic. Sulphuretted hydrogen gas gave the fluid a yellow tinge. The test with the nitrate of silver and ammonia threw down a very slight yellow precipitate. From the fluid contained in the small intestines, a sufficient quantity of precipitate could be collected, to reduce the arsenic to its metallic state. The fluid vomited at half past four, contained so much arsenic, that from one half of it many grains of the precipitates were collected, a large quantity of metallic arsenic reduced, and a very well-marked alloy formed with it and copper.—*Abridged from Medical and Physical Journal.*

The symptoms in this case certainly do not represent the usual train of phenomena observed in cases of poisoning by arsenic ; and Mr. Jennings conjectures, that they may have been checked by the presence of opium. This we think very probable ;—and if he had examined the contents of the stomach, or what was vomited, and detected the presence of opium in these fluids, and none in the contents of the small intestines, in which there was a large quantity of arsenic, and on which the effects of the poison were evident, we should have believed that the question had at least received all the elucidation of which it was susceptible.

Glasgow Medical Journal.

* A most extraordinary combination of remedial agents, certainly, in a case of poisoning by laudanum.—Ed.

IV.

ON A NEW AND SIMPLE MODE OF
OPERATION FOR NÆVUS.

By MARSHALL HALL, M.D.

THE danger of hæmorrhagy from the excision—the excessive pain of the ligature—and the extensive scar left by vaccination, as these have been respectively employed for the cure of nævus, induced me to consider whether some less objectionable mode of operation in these cases might be devised.

About nine months ago I was afforded the opportunity of examining a case of this kind, and of superintending the operation, by my valued friend, Mr. Heming, of Kentish Town.

This operation consisted in introducing a *couching needle* with cutting edges, at one point of the circumference of the nævus, close by the adjoining healthy skin; from this point the instrument was made to pass through the tumor in eight or ten different directions, so as to produce slight incisions through its textures, parallel with the skin, but not so as to pierce the tumor in any other part. The first point of puncture was made the *centre* of the several rays of slight incisions effected by merely withdrawing, and again pushing forward the little instrument in the manner and in the various directions, just described.

The nævus was oval, and rather larger than a shilling; the couching needle was introduced at one point, passed as nearly as possible to the opposite edge of the tumor, without piercing it, and then in various directions, until eight or nine punctures, or rather incisions, traversing the texture of the tumor, but not the skin, had been made. A little

pressure was then applied over the tumor, by means of strips of adhesive plaster. There was no pain, and of course no hæmorrhagy, and as the skin was only punctured in one point, there could result no scar.

I expected that inflammation would take place, and that a cicatrix would be formed, which from its solid texture and progressive contraction, would obliterate the textures of the tumor.

For some time—for several weeks—little appeared to have been effected. There was little or no change in the appearance of the nævus of any kind. Indeed, it was almost concluded that the plan had failed—that the vitality of the part had been too low to yield the degree of inflammation required for the cure.

What a short time did not effect, however, a longer period accomplished completely. Half a year after the operation the tumor was found to have disappeared, and the color of the skin to be nearly natural: the skin itself was perfectly preserved, and free from any appearance of scar.

To obviate the occurrence of hæmorrhagy, of pain, and of scar, is of sufficient importance, in itself, to attract the attention of surgeons in the treatment of this affection. But, besides this consideration, nævus sometimes occurs in situations, as in the tongue, the eye-lids, &c. not admitting of any other mode of operation. It does not appear that pressure forms any necessary part of the treatment. The cure in the case detailed was gradually effected, long after pressure had ceased to be employed.

Medical Gazette.

V.

For the Boston Med. and Surg. Journal.

REMARKS ON INOCULATION.

THERE is certainly no subject within the domain of mere theory better deserving of attention, than the process by which inoculation produces specific disease. Nothing is more familiar than the fact, that the virus of smallpox, or vaccinia, when inserted into the cuticle, will reproduce the disease, causing the appearance of a pustule in the one case, and of a vesicle in the other, at the point where the virus was introduced; with this difference in the two cases, that in the former the eruption is more or less general over the surface, and in the latter is limited to the place of the operation itself. Now this is generally explained by saying that the virus is absorbed into the mass of the circulation, and that the disease makes its appearance in consequence of the general effect thus produced on the system. If the local disease disappeared wholly, and the eruption were independent in its situation of the original point of the puncture, this explanation would be more satisfactory than it now is. But why, on the theory of absorption, should the point of the inoculation be also the point at which the disease makes its appearance? That certain diseases do occur from inoculation with poisons, independently of any local inflammation accompanying such disease, we have frequent occasion to observe. Thus in rabies, the saliva is introduced into the cellular subcutaneous tissue, producing a wound of the part; this soon heals, and the virus may then remain dormant for a week, a month, or even a year, before the disease becomes apparent. In this case we readily understand that the

virus undergoes an actual absorption, passing into the general circulation, and thus communicating its influence to the entire system. In the other case, we remark a very different order of phenomena. From the moment when the virus is first inserted, or certainly within twenty-four hours, some sign may be discovered of that specific inflammation which is to manifest itself at this point. This appearance increases, and in three or four days the local inflammation becomes perfectly obvious. Still there is no general excitement, no fever, nothing to mark that the general system has been affected. When the inflammation has increased to a certain degree, the axillary glands are affected, and then it is that the symptoms of a more general affection begin to be manifest. Some chill is felt, the appetite is impaired, the thirst increased, the pulse accelerated. In fact, fever is produced at this period, from sympathy of the general system with the local inflammation. As this subsides, the febrile symptoms diminish; and when it disappears, no trace of disease remains.

There are, then, two circumstances in the progress of inoculated vaccinia, at variance with the view commonly taken of its pathologic character. The first is the exceedingly short space of time which intervenes between the inoculation and its local effect. That in the course of twenty-four hours the matter might be taken up by the absorbents, carried into the veins, thence into the general circulation—and that the dyscrasis of the blood, thus produced, might in that period take effect upon a particular part, is indeed possible; and therefore this objection cannot be regarded as insuperable. Still, it is

to be remembered, that in the disease just referred to, rabies, which is the most unequivocal instance of general disease produced by inoculation, the period which elapses between the external injury and the appearance of the disease, amounts on an average to six weeks, and is often protracted to three months. The other remarkable circumstance alluded to, is the appearance of the disease at the same point at which the inoculation is applied. This seems wholly unaccountable on the supposition that the disease is produced in the manner alluded to. A general disease of the system, showing itself by an eruption, would either produce that eruption universally, or at least on different parts of the surface; and the circumstance of a minute wound previously inflicted on a particular part, would certainly not serve to give it a particular direction.

The view which I should be disposed to substitute for the one generally adopted, is simply this. That the virus being inserted in the skin, is very gradually dissolved in and mixed with the fluids of the part; that by its irritation it produces an increased afflux of blood, and local inflammation, and that this inflammation thus produced assumes by degrees the character and specific properties of that from which the matter itself was taken. Thus the disease, to a certain extent, continues entirely local, until it has proceeded to that extent at which the areola is about being formed. At this period, the surrounding capillaries become affected, are enlarged in their calibres, and admit blood instead of their usual colorless fluid. Hence an inflamed circle is formed around the vesicle, while the subcutaneous tissue becomes tense and hardened. The

neighboring glands also participate in the affection; a result which may take place by direct communication of the fluids of the parts through the lymphatics, or by a nervous influence operating on this susceptible texture. In this way may the axillary swelling be explained; while the general fever which immediately ensues, may be perfectly accounted for, as above suggested, by considering it as the effect of the irritation produced by the local affection.

To the view thus taken of this process we can imagine but two objections. The first arises from the fact that the inflammation of vaccinia is not always confined to the seat of the puncture, but shows itself occasionally in the production of other vesicles or papulæ in the vicinity. The same is still more true of variolous inoculation, which is almost always followed by several vesicles or pustules independently of that which occurs at the point of inoculation. It is to be remarked, however, that where the eruption of these diseases is not limited to the point in question, it appears to spread from it to the neighboring surface; and this fact speaks strongly in favor of a local influence somewhat similar to that which produces diseases in the course of the lymphatics; since if the spread of the disease were the result of the general affection, it might naturally be expected to extend to every part of the surface. That a general eruption is sometimes consequent on vaccinia, we have all occasion to observe; but the late period at which this takes place, and the rarity of its occurrence, equally forbid any inference from it in regard to the present question.

A second objection which may be made to the local character of vaccinia, arises from the common

notion that it is the general affection which constitutes the subsequent immunity from smallpox. Why an affection, whether more or less general, should protect the system from another disease, is sufficiently difficult to explain; and this difficulty is not materially influenced by the nature of the theory we adopt on this point. In the mildest forms of the vaccine disease, the general system is scarcely at all affected; yet the immunity afforded from variola is equally perfect as in the severest cases. The same remark is made by authors concerning inoculated smallpox; and whether in ordinary cases the affection proceeds from the centre to the surface, or the reverse, is not, so far as we can judge from analogy, a circumstance necessarily connected with its ultimate effect on the system.

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CHOLERA.

THE Samos, which recently arrived at this port from Cronstadt, is still below for the purpose of unlading that part of her cargo which is required, by the wise and wholesome regulations of our city council, to be taken out for purification, before coming up to the wharf. We understand that the officers of this vessel represent the cholera as having in a great degree abated at Cronstadt.—The Russian Government has abolished all quarantine, for the alleged reason, “that the whole empire being infected, nothing remains to be gained by the restrictions which were

in other respects inconvenient and imperfectly fulfilled.” It should be observed, however, that with that prudence and personal self-respect which so well becomes an imperial lawgiver, a double sanitary cordon is, notwithstanding, kept up round the court at Peterhof.

SKETCHES OF THE HISTORY OF MEDICINE.

1. *Among the Egyptians.*—The earliest records of the history of the world bring with them sufficient proof that the attention of mankind had been directed to the knowledge and cure of bodily disease. With the Egyptians, therefore, the oldest nation of which we have historical records, commence also the annals of our science.

It is natural for the human mind, when suffering from infirmity, to seek relief in the operation of superhuman powers. Accordingly, in the earliest times, diseases appear to have been referred to the anger of the gods; and from them, through their reputed agents, the priests, was a cure sought for. Hence those to whom the sacerdotal office was entrusted, became also the depositaries of medical science, and the source of medical authority. Of these priests there were several orders, different in rank; and a similar distinction was observed in their medical character. The priests of high rank practised the higher medicine, which consisted chiefly of magical ceremonies and expiatory sacrifices; while ordinary practice constituted the department of a lower order, who, from being bearers of vessels,

were termed by the Greeks *pastophoroi*, a term, however, not at all expressive of their medical character.

With respect to the amount of knowledge possessed by the ancient Egyptians, it is not easy, from the limited number of facts which have come down to us, to determine this point with precision. Among the articles of their *materia medica*, the squill possessed a high reputation, and was frequently employed in cases of dropsy.

The most celebrated of the arts with which they were acquainted, is that of embalming dead bodies. The general manner of performing this process is sufficiently familiar; but the following details, preserved by Herodotus, may not be uninteresting.

"As soon as an individual died, the embalmers called on the friends and showed them several models of painted wood, shaped like mummies. The first kind were of exquisite workmanship, and bore a name which it is not permitted to utter: the second were less curious and rich, and the third still plainer. The friends chose such a pattern as suited them, and agreed for the price. The embalmmnt, which probably varied somewhat, according to the external appearance of the coffin, was executed in the following manner. The brain was drawn out through the nose, with the aid of an iron hook, and the skull was filled with aromata and spices. The abdomen was then opened with a sharp Ethiopian stone; the intestines were drawn out, the cavity cleansed, and washed with palm wine; and spices, reduced to powder, were

introduced. They then filled it with myrrh, cassia, and other fragrant herbs, and sewed up the integuments. The body was then washed with a solution of fixed alkali, and left for seventy days, but not longer. At the end of this time, it was washed anew, smeared throughout with a kind of gum used by the Egyptians as glue, and enveloped in a cloth. The friends then received it, enclosed it in a coffin, having the same form, and deposited it in the catacombs.

Those who were less rich, contented themselves with injecting the abdomen with gum or resin, by means of a tube, without opening it. The body was then pickled for seventy days, the resin drawn out along with the intestines, and there remained only the skin and the bones.

The third sort of embalmmnt, reserved for the poor, consisted in washing the body and macerating it seventy days in an alkaline solution." —[Herod. II. 85, 86.]

We are by no means authorized to infer, that this custom of preserving the dead contributed at all to an acquaintance with anatomy. To refute this error, which has been adopted by some writers, it is sufficient to mention the curious fact, reported by Diodorus, that the *paraschista*, who made the incision, was obliged to flee for his life, among the execrations and blows of the bystanders, who regarded the act as a kind of sacrilege.

There are other curious proofs of their ignorance of the simplest principles of anatomy and physiology. They believed that the heart in-

creased two drachms every year, till the age of fifty, and then diminished at the same rate; which was the mode in which they accounted for natural death. They fancied that the little finger was connected with the heart by means of a certain nerve, or tendon; and it was for this reason that they dipped this particular finger into the liquor of their libations. Errors gross as these could only have existed, while the structure of the human body was utterly unknown.

It is certain, however, that the ancient Egyptians practised some processes in the arts which imply considerable acquaintance with practical chemistry. Among these may be mentioned that of coloring metals, which they carried to a great degree of perfection. It appears from Bergman, that they knew how to tinge silver with a blue color, and to manufacture emeralds of prodigious size. This author also adopts, from Galen, the account, that they understood the art of preparing plasters from white lead and vert de gris. But these processes probably belong to a more modern period.

Such are the scanty annals of medical science in Egypt, previous to the sixth century preceding the Christian era. Medicine, entirely confined to the hands of the priests, who mingled it with the rites of a degraded superstition, could not, from the nature of things, make any sensible progress. The exclusive domain of certain families, it descended from one generation to another, secured from innovation alike by a respect to authority, and by the total want of encouragement or reward for any effort to improve it.

TUBE FOR EXPLORING DEEP WOUNDS, ETC.

AN English surgeon has called the attention of the profession, through a medical journal, to a new and easy method of inspecting deep-seated parts, which cannot otherwise be brought into view. The inventor has proved its usefulness by his own experience, and recommends it in the examination of deep wounds, as well as the vagina, the os uteri and the rectum.

The instrument alluded to is simply a glass tube, open at both ends, inclining to a conical shape, the larger end spreading out, or bell-shaped, while the smaller one is rounded off very smooth, and approaches the semi-globular form. The opening at the smaller end must be as large as it can conveniently be made, and with perfectly smooth rounded edges—the whole tube of sufficient strength to obviate any hazard of breaking; and of different sizes, so as to be adapted to the various purposes to which they may be applied. The above description will enable any of the flint glass manufacturers to supply the tubes.

The rounded form of the smaller end renders its introduction perfectly easy; and if the patient is so placed that the light passes down the tube, whatever part presents at the opening may be inspected in a satisfactory manner, cleaning it if necessary with a piece of sponge fixed on the end of a probe. When used in examining the vagina, &c. or in making exploratio obstetrica, female delicacy may be spared by passing the tube through an opening in the linen.

New mode of giving Calomel in the treatment of Syphilis.—A butcher, 28 years of age, contracted syphilis in the course of the last year; and applying for relief to cer-

tain practitioners, who disgrace humanity by their vile charlatanism, obtained from them a large quantity of corrosive sublimate, disguised by the admixture of other drugs. The sores got well, or disappeared rather, under this treatment. But, some months after, the man suffered extremely from headach of the most excruciating intensity, of which emetics and bleeding procured him some alleviation. An eruption on the face now made its appearance, chiefly affecting the eyelids and the nose, and this brought him into the hôpital St. Louis. Here, as he showed symptoms of *gastro-enterite*, he was kept on slops, and such a regulated diet as seemed to check the progress of his disorder for a considerable time: all of a sudden, however, tubercles covered a great portion of his skin. He was ordered the *aqueous extract of opium*, with no success; then other methods, without amelioration. M. Biett now thought he should try a new mode of treatment, which suggested itself to him. This was to give the patient day after day an errhine, composed of a certain quantity of calomel, combined with an inert powder. In this way the man took successively, *eight, twelve, fifteen, twenty grains*, daily; and before a month was well elapsed, found his tubercles gone, his ulcerations cicatrized, and his general health so much improved that he was able to leave the hospital. He came in again subsequently for an inflammation of the synovial capsule of the knee, which was got down by cupping, leeching, and emollient applications. Some new pustules of his old complaint being observed, he was put on calomel once more, given in the manner just mentioned; and the consequence has been so satisfactory, that there seems to be no likelihood whatever of a return of the disorder.

M. Biett has employed calomel in powder in several other cases of secondary syphilis, and always with

the most satisfactory results. Besides giving it in the form of an errhine, he applies it externally sometimes to venereal ulcers, and his success is truly remarkable.

Gazette des Hôpitaux.

Abundant and wholesome Nutrient from Bones.—M. Darcet continues his ingenious researches on this subject. At a meeting of the Académie des Sciences last month, he read a memoir, of which the following are some of the particulars. The fifteen parts of bone commonly contained in one hundred parts of butcher's meat, will yield six of a pure and substantial alimentary substance; consequently the hundred parts of butcher's meat, which have hitherto produced no more than about twenty-four parts of aliment, will now produce thirty, if the gelatine and fatty substance of the bones be made use of: thus increasing the available portion of animals' flesh by one-fourth, or making four oxen go as far as five. The learned academician then stated some of the results arrived at by the Committee of the Faculté de Médecine, who have distributed during the space of three months the broth of bones (or as it is called, the *bouillon à la gelatine*), to forty patients and attendants of the Clinique Interne, and thereupon make the following report:—1. That the employment of gelatine not only introduces into dietetics a great improvement, but an economy that should not be neglected; 2. That the broth of bones is as agreeable as that which is usually employed in the hospitals; and 3. That it is not only nourishing and easy of digestion, but wholesome and by no means productive of any bad effect in the animal economy.

The Hôpital Saint Louis possesses an apparatus capable of producing 900 rations of this broth each day; and the apparatus has been in operation during the last twenty months,

so that the hospital has thus been supplied with 550,800 rations of the *bouillon à la gelatine*, attested by the physicians of the establishment to be excellent, and promising the most easy and advantageous means of subsistence for the poor. The Hotel Dieu, also, has an apparatus of the same nature, in use these fifteen months: it has furnished 443,650 rations of the bouillon; and six reports from the establishment, addressed to the Administration of Hospitals, fully bear testimony to the advantage of making use of the gelatine, which may be so abundantly procured from bones.

Bread from Sawdust.—Dr. Prout, in his learned paper on the ultimate composition of elementary substances, in the Philosophical Transactions, gives a short account of M. Autenreith of Tübingen's experiments on the conversion of lignin into food. M. Autenreith takes a piece of wood, and by frequent maceration and boiling, separates from it everything which is soluble in water. The wood thus purified is then reduced to sawdust, repeatedly subjected to the heat of an oven, and finally ground into flour. It requires leaven in the baking, with the addition of which, it makes a uniform spongy bread. The color is rather yellowish; but when well baked and crusty, it is not only very nutritious, but much superior in every respect to the brown bread made of the bran and husks of corn-flour.

[This is a discovery, as Mr. Herschel remarks,* which renders famine next to impossible; and deserves a far higher degree of celebrity than it has obtained.]

M. Recamier's Remedy in Puerperal Peritonitis.

Solution of gum arabic, eight ounces.
Syrup of white poppies, one ounce.

* See his Discourse on the Study of Natural Philosophy, page 65.

Subcarbonate of potash, one drachm.

To be taken by spoonful every two hours, in an infusion of marsh mallows.

M. Herisson's Remedy in Chronic Gastro-enterite.

Alcoholic tincture of black hyoscyamus, one drachm.

Tincture of guaiacum, two drachms.

Thirty drops of the mixture to be taken, morning and evening, in pure water.

A Remedy in Dysentery.

Acetate of lead, four grains.

Distilled water, two ounces.

Opium (Thebaic extract) two to four grains.

To be taken in spoonful every two hours. This is a remedy which was very successfully employed at Lyons in an epidemic dysentery, in which antiphlogistics and other means had failed.

Gazette des Hopitaux.

Sulphate of Quinine in Strumous Ophthalmia.—Mr. Mackenzie, of the Glasgow Eye Infirmary, recommends the use of this salt, in cases of inflammation of the eyes which are decidedly of a strumous character:—not only in phlyctenular ophthalmia, but also in corneitis, an ophthalmia with which a degree of iritis is generally conjoined.

Poison in Cabbage.—The family of Mrs Dingee, of Philadelphia, were severely attacked a few weeks ago, in consequence of eating a boiled cabbage. We understand that Mr. Fenner, a member, died on Sunday morning, and Mrs. Dingee died yesterday morning; three members of the family lay very ill, but have since recovered.

It is thought that the cabbage contained a poisonous worm, of a kind that has frequently been found in the cabbage plant. A dog and a cat that ate from the dish in which some of the cabbage was placed, took sick.

Gas Lights from Water.—An English paper informs us that a highly interesting discovery is about to come before the public, resulting from the experiments of Professor Donovan, and Mr. Lowe, of Bricklane Gas works. Letters patent have been obtained for the invention; the subject is very much talked of, and the question generally asked is, how is the gas made? At present no satisfactory information respecting the process can be given; but we understand the hydrogen gas, obtained by the decomposition of water, is charged with an illuminating principle by passing through some liquid procured during the distillation of pit coal, in the ordinary process of gas making. The requisite apparatus is much more simple than that used at present. The new gas is very superior in illuminating power, and may be obtained at a much lower price. If such be the nature of the process, and if no serious difficulty arise when tried on a large scale, it is evident the invention will be considered almost invaluable.

New Mode of Economy.—An invalid in Paris is said to have recently recovered his health by riding daily at the funerals of his fellow citizens. The number of funerals which go out of the city every day, and at which the carriages are furnished by the relatives of the deceased, renders this account not improbable.

The Smallpox—has made its appearance in Winslow, Me. One lady lies dangerously ill, having taken it by washing the clothes of her husband, who had recently returned from Quebec.

M. Chabert, the celebrated fire-eater, is said to have arrived at N. Y.

Whole number of deaths in Boston during the fortnight ending Sept. 30, 52. Males, 34—Females, 18. Stillborn, 1.

Of dysentery, 4—canker, 3—hooping cough, 1—typhous fever, 1—consumption, 7—hip complaint, 1—dropsy on the brain, 3—scarlet fever, 3—bilious fever, 1—accidental, 2—inflammation on the lungs, 1—dropsy, 1—old age, 2—infantile, 2—cholera infantum, 1—mortification, 2—unknown, 4—stoppage in the bowels, 1—scald, 1—fever, 1—brain fever, 1—croup, 3—measles, 1—intemperance, 1.

ADVERTISEMENTS.

EUROPEAN LEECHES.

JARVIS & PEIRSON, have just received a prime lot of large European Leeches. They were selected at Gottenburg, with great care, by a person well acquainted with the business, and will be applied, without additional expense, in any part of the city.
188 Washington Street. Oct. 11.

FRESH MEDICINES AND LEECHES.

CHARLES WHITE, No. 269 Washington, corner of Winter Street, has received, by the late arrivals from Europe, a fresh supply of Medicines and Leeches. 3t Oct. 11.

PRIZE ESSAY.

JUST received, by CARTER & HENDEE, An Essay upon the Nature and Sources of the Malaria or Noxious Miasma, from which originate the family of diseases usually known by the denomination of Bilious Diseases; together with the best means of preventing the formation of Malaria, removing the Sources, and obviating their Effects on the Human Constitution when the cause cannot be removed. By CHARLES CALDWELL, M.D., Professor of the Institutes of Medicine and Clinical Practice in Transylvania University. Oct. 1.

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